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Tractor Test and Power Museum, The Lester F.  
Larsen

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January 1950

## Advertising Brochure: Case W-9

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# CASE<sup>®</sup> W-9

## TERRALOAD'R

1¼ to 2¾-cu. yd. heaped capacity  
Four-wheel-drive, rear-wheel steer



1<sup>st</sup> in quality  
for over 100 years

**J. I. CASE COMPANY, RACINE, WISCONSIN, U. S. A.**





4-wheel-drive, rear-wheel  
power-steer

Power-shift without clutching in  
all speeds plus forward and reverse

Financing or LEASE plans  
to fit your needs

Approx. weight . . . 15,620 lbs.

11,000 lbs. break-out force

6,000 lbs. carrying capacity

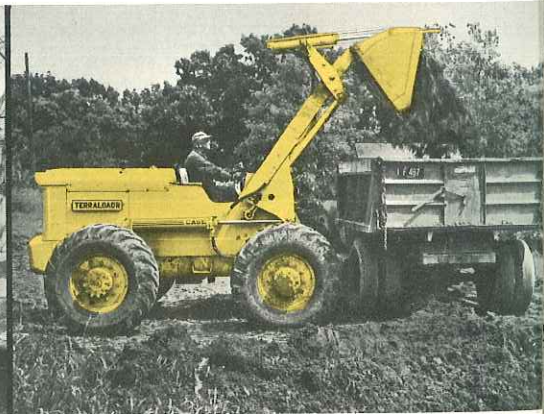
**100% Case-engineered... Case-built... Case-powered!**



**EXCAVATING**



**SNOW REMOVAL**

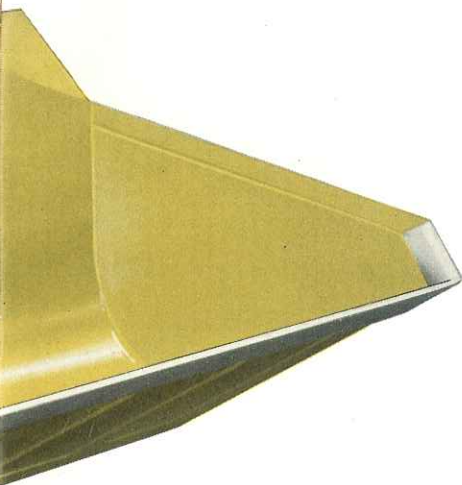


**TRUCK LOADING**



# NEW **CASE** W-9 TERRALOAD'R

**sets new performance standards on rubber  
...saves you up to \$1000 or more in first cost!**



Here, at last, is a big-capacity 4-wheel-drive, rear-wheel steer loader that gives you all the advanced performance features you've wanted in a wheeled unit — at savings up to \$1000 or more in first cost. With the new Case W-9 Terraload'r you get ...

Better balance and stability — Low center of gravity, combined with better mass weight distribution provides increased traction for tough loading without "bucking", or raising rear wheels off ground. This, together with wide-tread stability, enables you to dig, carry and dump heaping payloads faster, easier, more safely.

Improved operator safety — Booms and cylinders are completely out of the way ... operator has unobstructed visibility in all directions ... can get on or off machine easily, ANYTIME.

Fast, easy to handle — Constant-mesh hydraulic transmission gives the Case W-9 "on-the-go" power-shift thru three forward and reverse speed ranges — from 0 to 21 MPH — as well as forward and reverse shuttle shift. Comfortable steering-wheel-position, plus power-steering on rear axle, make unit extremely easy to handle and maneuver in close quarters.

Power matched to the job — High-torque Case gasoline engine (or famous all-weather starting Case diesel), with torque-converter drive, insures correct power-to-weight ratio for best operating efficiency with minimum wheel slippage — plus maximum fuel economy, dependability and long life.

One warranty, one service source — Complete machine — including the engine — is engineered, built and fully warranted by J. I. Case Company, and serviced by reliable Case Industrial Dealers everywhere. No costly delays on parts! No "split-responsibility" on service!

Investigate today — Call or write your nearest Case Industrial Dealer for a free demonstration. Also ask about the new Case financing and LEASE plans which let you buy or rent this new money-making machine on easy monthly terms, without tying-up needed working capital.

## 3 Bucket Sizes

- 1 1/4 cu. yd.\* — for tough digging
- 1 3/4 cu. yd.\* — for std. materials
- 2 3/4 cu. yd.\* — for light materials

\*heaped capacity



**LAND CLEARING**



**ROUGH GRADING**

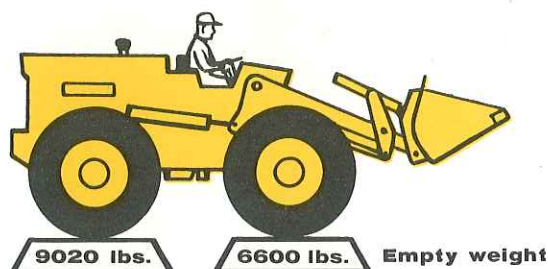


**BULK MATERIALS HANDLING**



# Case-engineered for **BETTER BALANCE AND STABILITY**

One look at the *low*, clean lines of the Case W-9 Terraload'r tells you here is a rugged, well-balanced machine that is engineered to utilize its full power and speed for *increased production, with maximum safety to the operator and machine.*



## **Better balance – fore and aft**

Since proper weight distribution is a major factor in the proper performance of rubber-tired loaders, the W-9 has been designed so the *rear wheels carry approximately 37% more weight than the front wheels* when the bucket is **EMPTY**. This not only provides greater traction for digging . . . it also makes it safer to steer full bucket-loads down steep grades and over rough terrain — without the usual bounce, and forward-pitch encountered with ordinary machines that are too heavy on the front end.

## **Greater resistance to side thrusts**

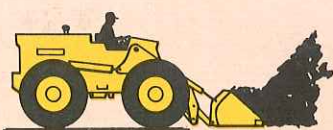
To insure complete lateral stability, Case engineers gave the W-9 a low center of gravity, with an extra-wide wheel tread of  $74\frac{3}{4}$ ". This, together with *shorter, more rigid lift-arms*, pivoted **AHEAD** of the operator, eliminates the customary "swing and sway" experienced with conventional rubber-tired rigs, when lifting and dumping heavy loads. It also helps maintain loader alignment, and reduces maintenance on boom-assemblies. At the same time, the W-9 gives you  $16\frac{1}{2}$ " of ground clearance —  $1\frac{1}{2}$ " more than competitive rigs — so you can maneuver full loads on soft footing, or over obstacles, without getting hung-up.

## **Ask for demonstration proof**

The best way to evaluate the extra stability, balance and clearance you get with the Case W-9 is to *compare it in action* with any other machine in its size range. Your nearest Case Industrial Dealer will gladly arrange such a proof demonstration anywhere, anytime — so you can see for yourself that the W-9 *digs more, carries more, dumps faster* than competitive loaders costing hundreds of dollars more.

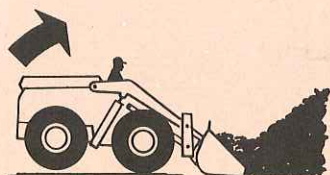
**CASE  
W-9**

### **No bucking!**



maintains traction on all four wheels

**Ordinary Loaders**



rear-wheels tend to raise off ground when digging

### **No nose-diving!**

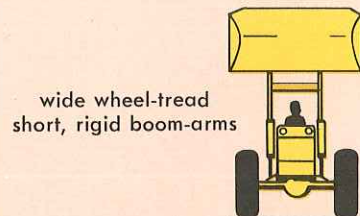


counter-balanced for safer driving

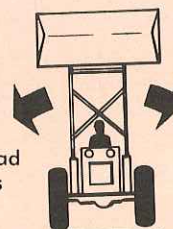


nose-heavy when fully loaded

### **No side-sway!**



wide wheel-tread  
short, rigid boom-arms



narrow wheel-tread  
long boom-arms





### You dig more

Owners are literally amazed at the superior digging ability of the W-9 Terraload'r. There's no "bucking", or tendency to raise rear wheels off the ground, when loading. You get *full traction on all four wheels at all times* (even with cab installed), thus enabling you to utilize the full power of the engine to fill the bucket faster. Wide, flat-bottom Case bucket also helps speed digging because material "boils-in" easily.

### You carry more

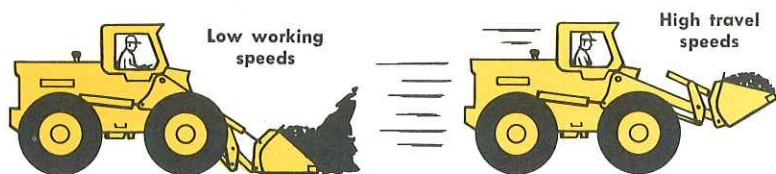
40° bucket roll-back, combined with better fore-and-aft stability, enable the Case W-9 to carry bigger payloads at higher average speeds — with a *minimum amount of spill loss*. With the W-9, there's less bounce, less forward-dip, when traveling over rough ground because the extra weight on the rear wheels helps balance the load in the bucket.

### You dump faster

Since the W-9 bucket has a forward reach of 62½" beyond the frame at 7' dump height, and 46½" reach beyond the tires, you can pitch a load into the center of a truck without ramming it. Dumping is speeded because of shorter travel cycle.







**Full power-shift in all speed ranges  
... plus forward and reverse**

Constant-mesh hydraulic transmission lets you change speeds or direction instantaneously on-the-go, without loss of momentum. Two conveniently located levers — one for speed selection, one for forward and reverse — give instant, positive control, without clutching.



**Case-engineered for**

## **SAFER, EASIER OPERATION**

No machine — regardless of design or price — can be any better than the operator who runs it. That is why every feature of the Case W-9 has been carefully engineered with the operator in mind — to make his job *safer, easier, more productive for YOU.*

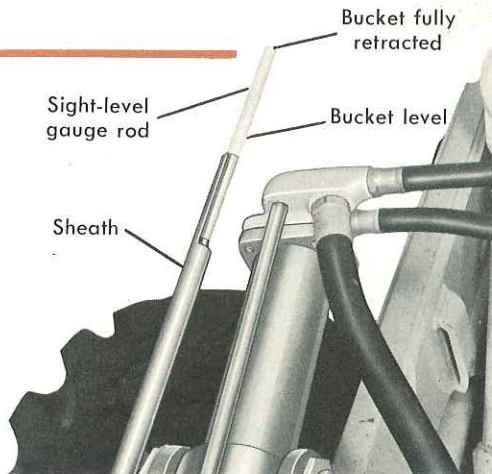
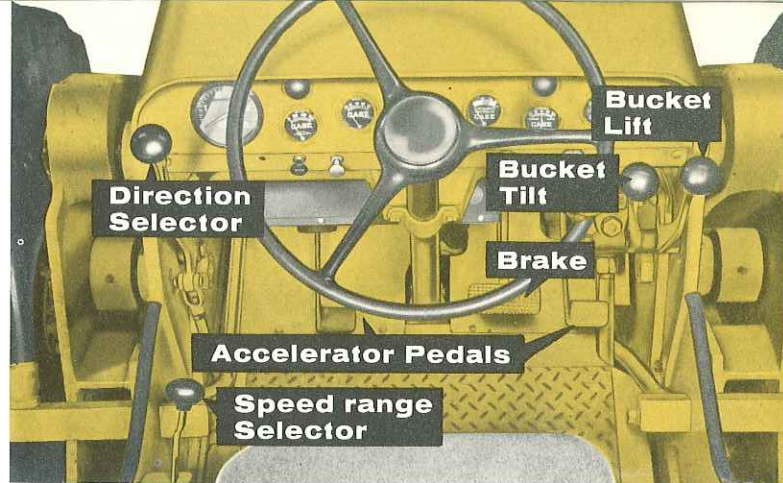
For example, pivoting the loader boom-arms *ahead* of the operator gives unequalled visibility on both sides... *eliminates danger of catching operator's arm in the lifting mechanism*... makes it easy to get on or off the machine, or open cab doors, with the lift-arms in *any* position.

And note the generous amount of space in the operator's compartment. *No feeling of being "caged-in" here!* Everything is handy and ship-shape from the air-controlled seat cushion — to the exclusive *dual* foot accelerators and functional instrument panel. Instant power-shift transmission with torque-converter drive and rear-wheel power-steering make operation so easy that *beginners soon become experts* in running the Case W-9. Even a little thing like the Case sight-leveling gauge on the bucket can add up to more yards moved per day, with less operator fatigue. *Just ask any operator who has tried it!*



## All controls conveniently arranged

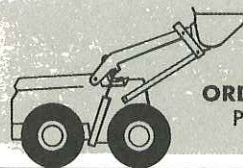
Operator rides in a big, comfortable air-controlled seat, fully adjustable fore and aft with all controls within easy reach. Steering wheel is tilted just right for comfortable arm leverage and readable-at-a-glance instruments are color-coded for proper operating range. Two handy foot throttles — one at right side for normal operation, plus an extra one on left side — let you accelerate engine with left foot, while right foot operates brake. Transmission is automatically disengaged by depressing brake pedal, transferring full power to hydraulic system.



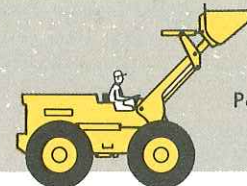
## Automatic sight-leveling gauge tells bucket-angle at a glance

This handy, time-saving device — exclusive with Case — consists of a solid steel rod, which moves up and down inside a metal sheath. Attached to upper rear of bucket on right side of loader, the sight-leveling rod slides out *beyond* end of sheath when bucket is retracted, slides back even with end of sheath when bucket is level. Thus, by merely glancing at the leveling rod, the operator is able to level his bucket to proper digging position *on-the-move* — without waiting for bucket to reach the ground. Result: Faster cycles, more material moved per shift.

## Compare visibility



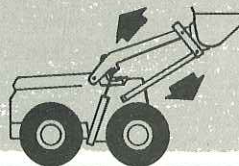
**ORDINARY LOADERS**  
Poor side visibility



**CASE W-9**  
Perfect side visibility

## Compare operator safety

**ORDINARY LOADERS**  
Boom-arms constantly moving on both sides of operator

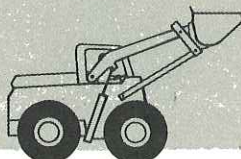


**CASE W-9**  
Boom-arms up front — out of the way



## Compare convenience

**ORDINARY LOADERS**  
Impossible to open cab doors with boom-arms up



**CASE W-9**  
Easy to leave with boom-arms in any position



**ORDINARY LOADERS**  
Impossible to open cab doors with boom-arms up



**CASE W-9**  
Easy to open cab doors anytime — with booms up or down



Case-engineered with the

# RIGHT ENGINE FOR THE JOB

One of the most important features of the W-9 Terraload'r is the fact that it has been engineered as a complete unit. You get just the *right combination of engine power and transmission ratio for the weight of the machine — to provide high-speed cycling performance and to maintain maximum traction with minimum wheel-slippage.* This is the main point to remember because when you buy a loader, you actually are buying the tractive ability of the *complete unit* — NOT just an engine!

Other loader manufacturers, for example, have to begin by designing the *loader*. Then they attempt to find some other manufacturer's *engine* that will come as close as possible to meeting their power requirements. As a result, competitive wheel loaders invariably are either under or over-powered — based on over-all weight, balance, size of tires, and ability to maintain traction. Just the *reverse* is true of the W-9 Terraload'r.

## Balanced design is the answer

Since J. I. Case is a leading manufacturer of diesel and gasoline engines, it was an easy matter to *balance* the design of the W-9 around the rugged Case Model 700 *engine* — which has just the *right* power characteristics for the weight and balance of this particular machine. This way you are assured of getting all the power you need to do the job — *plus maximum economy in investment and operating ef-*

*iciency.* In fact, field tests prove that if we were to put a larger engine in the W-9, all we would achieve would be more wheel-slippage. This would simply increase tire wear and fuel consumption, *without* increasing the amount of work performed.

## Up to 40,000 lbs. of digging power!

Powerful high-torque Case Model 700 engine, equipped with torque-converter drive, gives the W-9 Terraload'r up to 40,000 lbs.\* of crowding power for fast digging in all types of materials. Four-wheel-drive traction, achieved through balanced weight distribution, combined with direct thrust design of the hydraulic cylinders, makes it possible to utilize the full power and prying action of the machine for maximum digging efficiency.

## You can depend on Case engines

Case overhead valve diesel and gasoline engines are known the world over for their outstanding fuel economy, dependability, and long life. In fact, *many Case engines are still performing efficiently after 10 years of hard service, without major overhaul.* Wet-type cylinder sleeves and multiple cylinder heads insure quick, easy replacement after long service, without removing the engine. Precision main and connecting rod bearing inserts can also be replaced easily, without removing crankshaft.

\* Theoretical max. stall rim-pull, assuming adequate traction

## Unequalled Break-out Force!

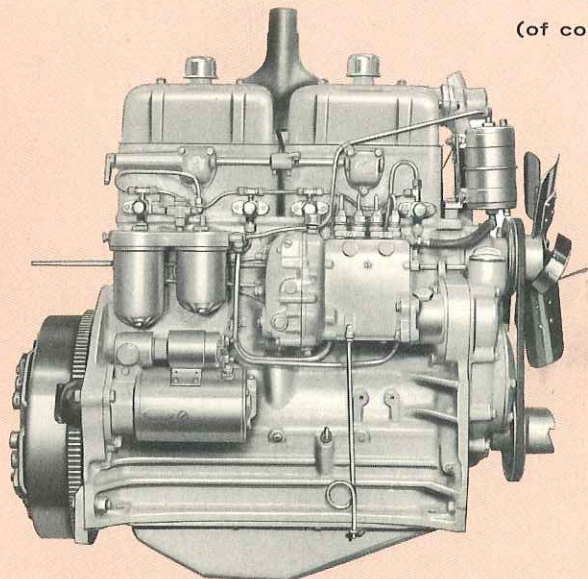
Big 42 GPM hydraulic pump teams with husky double-acting lift and bucket-tilt cylinders, to give the Case W-9 a conservative break-out force of 11,000 lbs. at ground level. Even when working in *hard clay*, you can pull the valve back and the bucket will break-out instantly—like it was handling snow.





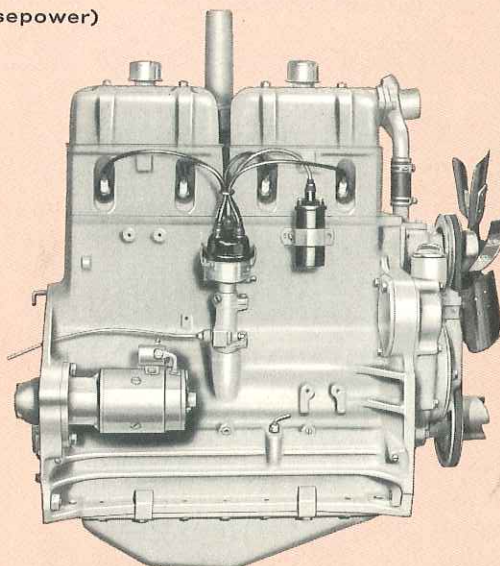
# Choice of Two Dependable Case Engines

(of comparable horsepower)



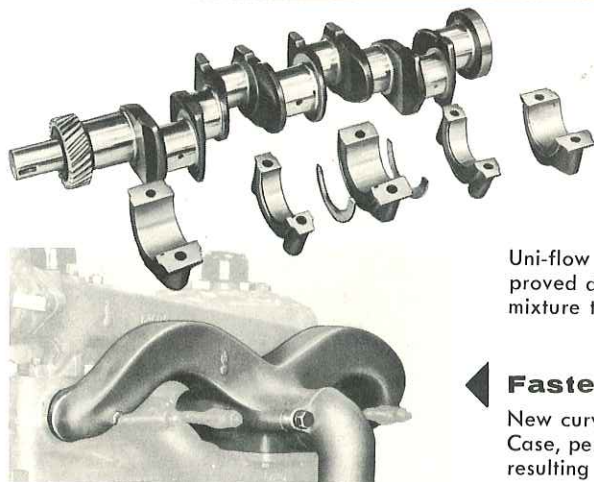
## "Powrcel" DIESEL

Known for its quick starting, even in cold weather, this high-torque 267-cu. in. Case diesel features controlled "Powrcel" combustion, single-plunger injection pump, parco-lubricized iron alloy pistons — plus the most efficient filtering system ever devised for keeping water and abrasive particles out of the injection system. (A "must" for efficient diesel operation.)



## "Powrdyne" GAS ENGINE

Built with diesel strength and ruggedness, this 251-cu. in. Case gasoline engine has battery ignition, super-sensitive governor, heat-resistant exhaust valves, aluminum pistons. Exclusive high-turbulent "Powrdyne" combustion speeds complete burning of fuel . . . produces highest compression ratio and best economy yet attained in any tractor engine of comparable size.



## Vibration-Free 5-Bearing Crankshaft

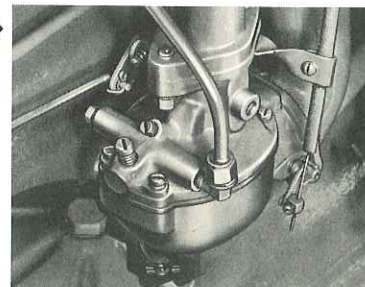
Electrically-hardened, forged-steel crankshaft is dynamically balanced, with big tri-metal-lined bearings on each side of each connecting rod, to insure smooth, vibration-free operation at all times.

## Improved Carburetion

Uni-flow manifolding, combined with improved design of carburetor, adjusts fuel-air mixture to power needs — automatically.

## Faster Exhaust

New curved exhaust manifold, developed by Case, permits faster escape of exhaust gases, resulting in greater operating efficiency.



## Torque-converter drive adjusts machine speeds to changing loads WITHOUT MECHANICAL SHIFTING

Gear	Travel Speeds — Forward and Reverse	Max. lbs. Push or Pull
First	0 to 2.5 MPH	40,000*
Second	0 to 6.5 MPH	14,200
Third	0 to 21 MPH	4,970

\*Assuming adequate traction

As indicated by the accompanying chart, the Case W-9 gives you all the push-pull power you can use, within the capacity range of the machine. In addition, torque-converter drive automatically adjusts machine speed to changing loads, without need for clutching or shifting gears. Thus, as the load increases, your ground-speed simply slows down — but the engine never stalls. The hydraulic converter also cushions jolting shocks . . . keeps engine and hydraulic pump operating at near peak power at all times, for maximum efficiency.



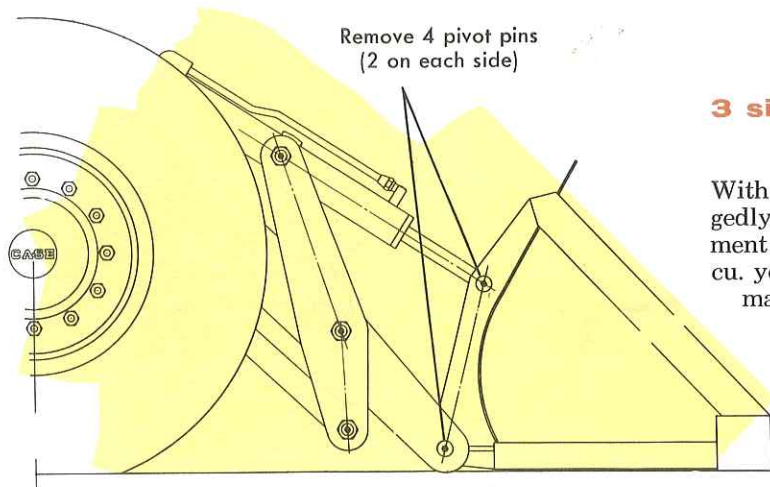
## Case-engineered for

# LONG, TROUBLE-FREE SERVICE

The deeper you go into the design of the Case W-9 Terraload'r, the more you'll realize that Case engineers have gone all the way in their effort to bring you the *simplest, most durable* machine that can be produced by sound engineering and quality manufacturing methods.

Superior operating features — like proper balance, better stability, unobstructed visibility, and correct power-to-weight ratio — are naturally important because they enable the W-9 to *do more work per day, per week, or per month*. In the final analysis, however, you also want a rugged, simply-built machine that can *stay on the job* — month after month, year after year — *with minimum upkeep and repair expense*. Here, too, the Case W-9 offers definite advantages because of its:

1. **Stronger, all-welded sub-frame . . .** specially engineered to withstand twisting strains . . . with replaceable bushings at all wear points.



### Less hydraulic "plumbing" means fewer leaks . . . less maintenance

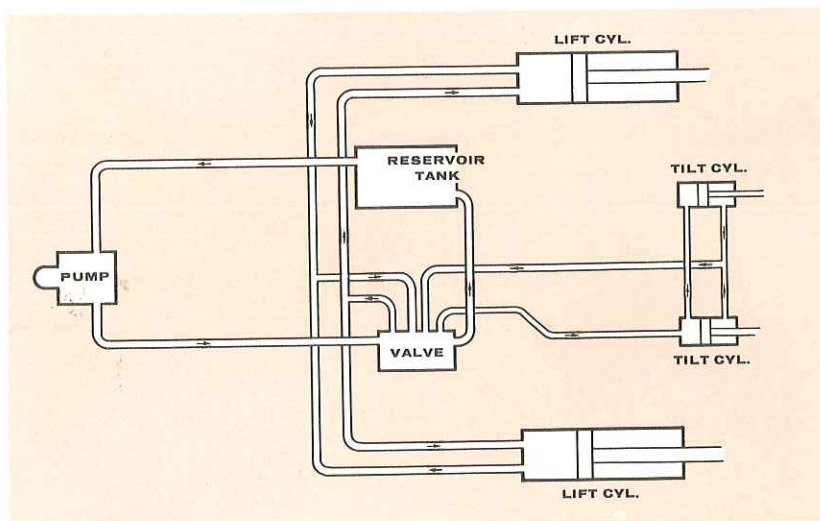
Even casual observation will show that the Case W-9 has less hydraulic hose, less fittings and less tubing than any other four-wheel-drive loader in its class. In addition, there is *not a single pipe thread seal in the entire hydraulic system*. SAE straight-thread O-ring connections are used throughout to eliminate oil leaks. Full-flow micron filter keeps oil clean, dirt-free at all times.

2. **Simpler hydraulic system . . .** minimum amount of "plumbing", tightly sealed against leaks, and protected by full-flow micron filter.
3. **Easier accessibility** to all working parts. Removable front cover plate exposes entire hydraulic circuits, as well as hydraulic brakes, brake lines, electrical system, power-steering and steering gear. Batteries are accessible by removing seat cushion, while air cleaner and filters are easily reached by removing one or both side hood-panels.

Of course, the best way to appreciate the *superior* advantages of the Case W-9 is to *compare* it point-by-point with other four-wheel-drive loaders in its class. Look them all over — for operating efficiency, ruggedness of construction, ease of servicing and maintenance. Then compare the *price*, financing arrangement, and *type of warranty* you get with each machine. We are sure you will agree that, all things considered, the Case W-9 gives you the *best all-around value of any loader in its size range*.

### 3 sizes of interchangeable buckets increase versatility

With the Case W-9, you have a choice of three ruggedly-constructed buckets for every operating requirement —  $1\frac{1}{4}$  cu. yd. (heaped) for *tough* digging;  $1\frac{3}{4}$  cu. yd. for *standard* materials; and  $2\frac{3}{4}$  cu. yd. for *light* materials. Buckets are quickly interchanged in the field, merely by pulling the lock pins and two pivot-pins on either side of the loader. So it's wise to order two buckets — one for digging, and one for light bulk materials handling or snow-removal work — so you can keep your W-9 busy year 'round.



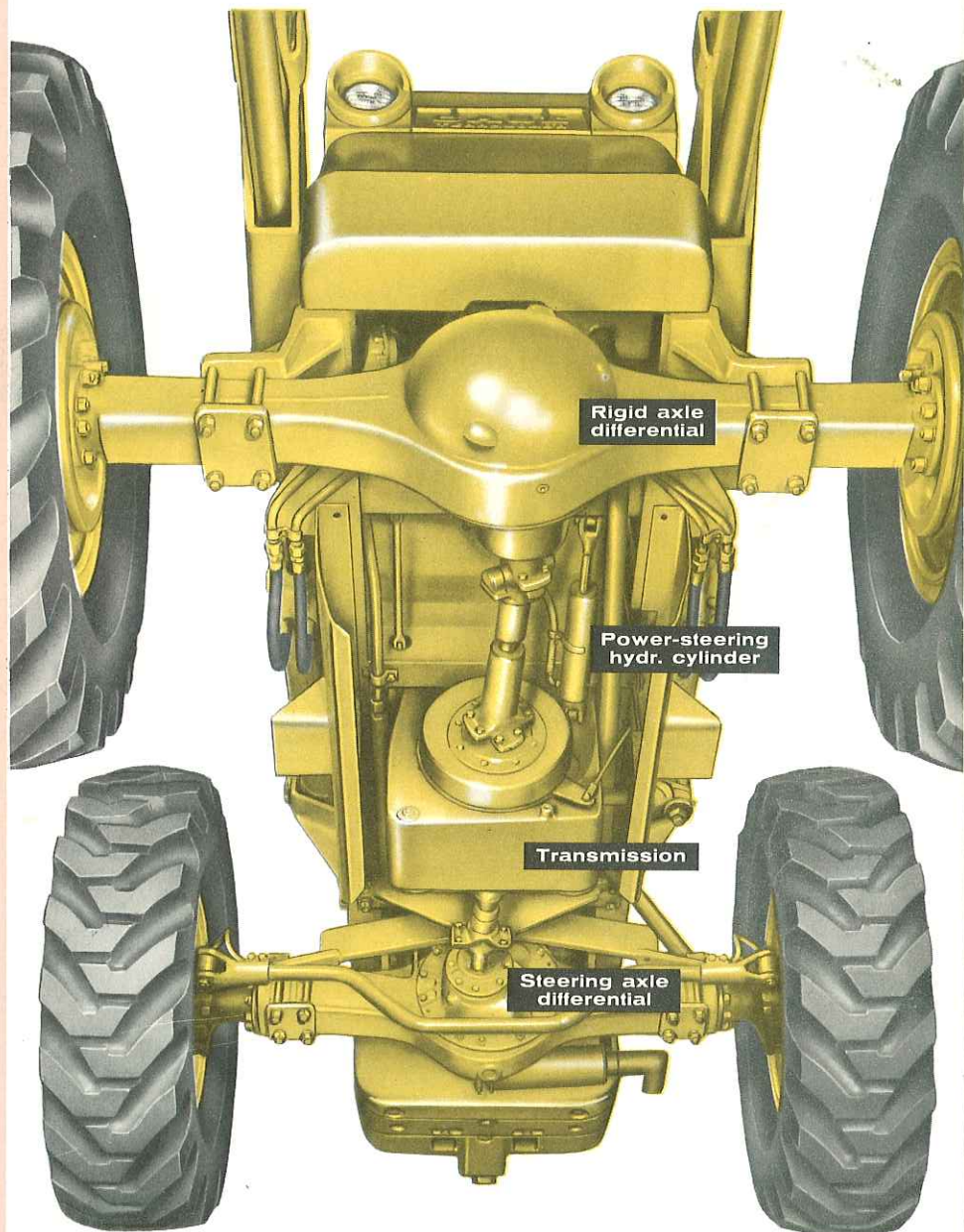


## Simple, rugged construction

Backbone of the W-9's compact, all-welded steel sub-frame are two heavy-duty channels which run the full length of the machine on each side. Here Case engineers have gone to the heaviest *ship* channel available (instead of the lighter *structural* channel used in competitive loaders) — in order to provide maximum strength and rigidity against the twisting, racking strains encountered in loader operation.

In addition, the W-9 combines tubular members with heavy, stress-engineered structural members and replaceable bushings throughout the chassis and boom sections — to achieve the utmost in strength and simplicity, with an absolute minimum of structural parts. The result is *the strongest chassis per pound of weight of any four-wheel-drive loader in the field*. Solid steel trunion-pivot ties boom-arms together at one end. Channel cross bracing at bucket end gives complete rigidity to loader.

Both W-9 axles are heavy-duty spiral-bevel type, with a separate planetary differential in each hub to insure an equal supply of power to each of the four wheels. Rear axle-steering is actuated by a heavy-duty, double-acting hydraulic cylinder which insures quick, positive response, yet enables the driver to retain the "feel" of the wheel. All four drive-wheels are equipped with heavy-duty power-boost hydraulic brakes for fast smooth stops, while a separate mechanical brake is provided for parking purposes.



## Convenient one-stop service under one warranty

Like all heavy-duty Case® TerraTrac® industrial wheel and crawler units, the W-9 Terraload'r is sold and serviced by reliable Case heavy machinery dealers everywhere. Furthermore, since the complete machine — *including the engine* — is built and assembled by J. I. Case, your Case dealer is equipped to service the entire unit under one warranty — without split responsibility. Fifteen central Case Branches with parts depots insure fast parts delivery anywhere in the U.S. and Canada.

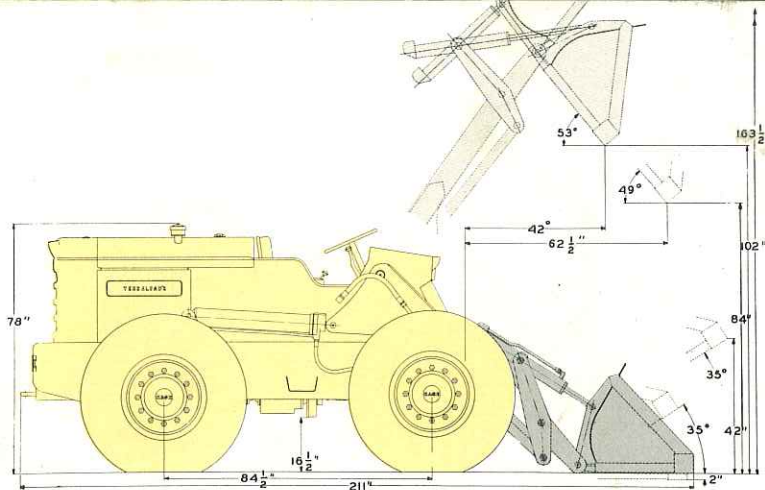




# SPECIFICATIONS FOR



## TERRALOAD'R



### BUCKET

Capacity (Std.) .....  $1\frac{3}{4}$  cu. yd. (heaped)  
 $1\frac{1}{4}$  cu. yd. (struck)

(Also see "optional" equipment)

Width outside Std. bucket ..... 90"  
 Roll-back (ground level) ..... 39°  
 Roll-back (at 3' carry) ..... 40°  
 Grading angle ..... 67°  
 Max. dump clearance (54°) ..... 8'6"  
 Reach to frame (at 7' ht.) ..... 62½"  
 Reach to tire (at 7' ht.) ..... 46½"  
 Digging depth ..... 1'0" @ 12°  
 Lift time (loaded) ..... 7½ sec.  
 Drop time ..... 4 sec.  
 Break-out force ..... 11,000 lbs.  
 Lift capacity ..... 6,000 lbs.

### OVER-ALL MEASUREMENTS

Height to Pre-cleaner ..... 6'6"  
 Width over tires ..... 89"  
 Width over hubs ..... 93"  
 Length — bucket on ground ..... 17'7"  
 Length — bucket at carry ..... 18'3"  
 Wheelbase ..... 84½"  
 Ground clearance ..... 16½"

### TURNING RADIUS

Outside corner bucket at carry ..... 19'0"  
 Outside rear hub ..... 21'11"  
 Outside rear counterweight ..... 19'3"

### WHEELS AND TIRES\*

Rear (Std.) ..... 14.00 x 24, 8 ply (tubeless)  
 Front (Std.) ..... 14.00 x 24, 8 ply (tubeless)  
 Wheel tread (front & rear) ..... 74¾"

\*Other sizes and types available



SALES & SERVICE

### ENGINE — Case Model 700, 4 cylinder, valve-in-head design

	Diesel	Gasoline
Gross engine	67.5	69.5
Flywheel HP* .....		
Displacement (cu. in.)	267	251
Bore & stroke	4⅞"x5"	4"x5"
Max. torque @	217' #	222' #
1200 RPM .....		
Fuel injection	Bosch	Updraft
Type PSB	carburetor	
Lubrication	Full	Full
pressure	pressure	pressure
Full tank capacity ..	25 gal.	25 gal.
Electrical system ...	12 volt	12 Volt

\*Sea level (calculated) maximum HP (based on 60° F. and 29.92" Hg.). Manufacturer's rating.

### POWER TRAIN

Torque converter ..... Single-stage, 3.5-to-1  
 stall ratio  
 Transmission ..... Full power-shift  
 Axles ..... Spiral bevel with planetary  
 reduction in each hub  
 Steering .... Hydraulic actuated on rear-axle

### MAX. DRAWBAR PULL IN LBS. (forward or reverse)

1st .....	40,000*
2nd .....	14,200
3rd .....	4,970

Torque converter automatically adjusts drawbar pull (or push) to above loads within following speed ranges:

### TRAVEL SPEEDS — forward and reverse (governed engine)

1st .....	0 to 2.5 MPH
2nd .....	0 to 6.5 MPH
3rd .....	0 to 21.0 MPH

### BRAKES

Service ..... hydraulic actuated, 4-wheel  
 Parking ..... mechanical on drive shaft

### WEIGHTS

	Empty	Loaded
Front .....	6,600 lbs.	15,090 lbs.
Rear .....	9,020 lbs.	5,100 lbs.
Total .....	15,620 lbs.	20,190 lbs.

### HYDRAULIC SYSTEM

Boom cylinder—  
 double-acting ..... (2) ..... 5" dia.  
 Bucket cylinders—  
 double-acting ..... (2) ..... 3½" dia.  
 Pump .... Gear-type driven from transmission  
 Capacity: 42 GPM @ 1800 RPM  
 Reservoir: Electric welded steel with baffles,  
 breather, oil level dip stick and full-flow  
 micron filter.  
 Standard "float" control valve—tilt three-  
 position, lift four-position.

**OPTIONAL EQUIPMENT:** 1¼-cu. yd. (heaped)  
 heavy-duty bucket with digging teeth; 2¾-cu.  
 yd. light material bucket; 2-spool control valve,  
 three positions with internal relief valve; all-  
 weather operator's cab; heater, defroster, wind-  
 shield wipers, muffler and radiator shutters.

### IMPORTANT

J. I. Case Co. reserves the right to change  
 specifications of its tractors and equipment  
 without notice and without incurring any obli-  
 gations relating to such changes.

**Name a date, we'll demonstrate!**



Litho in U.S.A. 559

CTS-111(r)

